10/644,206

PATENT

AMENDMENT B (RESPONSE TO PAPER NO. 20050708 (OFFICE ACTION DATED JULY 15, 2005))

## <u>REMARKS</u>

Claims 1-68 are pending in this case. In the amendment hereinabove, claims 1, 18, 35 and 52 have been amended. Based upon the following remarks, it is respectfully submitted that, in conformance with the foregoing amendment, all claims are allowable.

Claims 1-68 were rejected under 35 U.S.C. §102(b) as being anticipated by Chiu et al., U.S. Patent No. 5,369,678 ("Chiu et al."). This rejection is respectfully traversed and it is submitted that these claims, in conformance with the foregoing amendment, recite subject matter which is not anticipated by and is patentable over Chiu et al.

Independent claims 1, 18, 35 and 52 have been amended hereinabove to more expressly recite a feature of the presently claimed invention distinguishing it from the disclosure of Chiu et al. Using claim 1 as an example, in the presently claimed invention, "[the] first and second image signals correspond to [the] portion and a subportion of [the] subject, respectively, and [the] sub-portion is substantially contained within [the] portion". Hence, as discussed previously in Amendment A, the first and second X-ray radiation doses differ in one or more of a plurality of X-ray radiation characteristics, and are at least partially non-contemporaneous (e.g., sequential), plus the first and second image signals corresponding to the first and second X-ray radiation doses further correspond to the portion and a sub-portion of the subject, respectively, such that the sub-portion is substantially contained within the portion. In other words, one example of this would where the first X-ray radiation dose ("dose A") results in the first image signal ("image signal A") corresponding to the portion of the subject ("region A"), following which the second X-ray radiation dose ("dose B"),

Atty. Docket No.: 03-015-US (10101.03.0150)- 24 - CHICAGO/#1445878.2

10/644,206 <u>PATENT</u>

AMENDMENT B (RESPONSE TO PAPER NO. 20050708 (OFFICE ACTION DATED JULY 15, 2005))

which differs from dose A, results in the second image signal ("image signal B") corresponding to the sub-portion of the subject ("region B"), such that region B is a piece, or subset, of region A. Also as discussed previously in Amendment A, and as discussed in the present disclosure (e.g., at Figure 3 and paragraphs 00021-00022), this allows a region of interest to be identified and then subsequently viewed with an enhanced resolution.

In contrast to this, Chiu et al. expressly teaches exposure of a subject region with what amounts to a single X-ray radiation dose, i.e., one X-ray radiation exposure which, although it transitions from a full dosage in the center to reduced dosages extending radially outward from the center, such dosage transition is spatial and not temporal, i.e., it nonetheless remains consistent in its radiation characteristics. As expressly taught in Chiu et al., it is important—for the technique of Chiu et al.—that this single X-ray radiation exposure with consistent radiation characteristics be maintained so as to allow the user to "visualize the entire field of view for the purposes of orientation and placement, except that now the areas in the viewed image outside the point of interest are of lower quality." Column 2, lines 59-62. Indeed, maintaining this image continuity, albeit with varying image quality, is so important in Chiu et al. that image correction is used to maintain a consistent overall gray level. Column 11, lines 48-60.

It is noted that the Examiner appeared troubled by these remarks when presented in Amendment A. As for the use of the term "consistent" (which was believed at the time to better convey the intended meaning than the term "constant"), it is respectfully submitted that this does not "exist only in applicant's imagination" nor is it a "gross misrepresentation of the patent". In the portions of *Chiu et al.* cited above it is expressly taught how the dosage reduction, which is mentioned again at

Atty. Docket No.: 03-015-US (10101.03.0150)- 25 - CHICAGO/#1445878.2

10/644,206

PATENT

AMENDMENT B (RESPONSE TO PAPER NO. 20050708 (OFFICE ACTION DATED JULY 15, 2005))

column 14, lines 64-68, and column 15, lines 1-2, as cited by the Examiner, is a spatial dosage reduction, and not a temporal dosage reduction. The dosage "reduction" of Chiu et al. is spatial in that it is the integrated dosage over the prescribed area that is reduced. Column 2, lines 62-64. In other words, just like the analogy suggested in Chiu et al., the dosage appears as a fovea, with the dosage at a maximum in the center and reduced in the outer (radially) regions. However, such dosage pattern remains consistent over time, i.e., such dosage pattern is not varied over time, thereby allowing the user to "visualize the entire field of view for the purposes of orientation and placement, except that now the areas in the viewed image outside the point of interest are of lower quality." Column 2, lines 59-62. It is respectfully submitted that if the dosage were to also be varied temporally then it would be significantly more difficult for the user to "visualize the entire field of view for the purposes of orientation and placement" as prescribed in Chiu et al.

Claims 1-68 remain pending in this case. Based upon the foregoing amendment and remarks, it is respectfully submitted that these claims are allowable, and reconsideration and early allowance of these claims are requested.

Respectfully submitted,

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Atty. Docket No.: 03-015-US (10101.03.0150)- 26 -

CHICAGO/#1445878.2